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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,115	06/30/2006	Yehiel Ziv	1393GIT-US	5762
David Klein 7590 Dekel Patent Ltd. Beit HaRof'im 18 Menuha VeNahala Street, Room 27 Rehovot, ISRAEL			EXAMINER HOPKINS, CHRISTINE D	
			ART UNIT 3735	PAPER NUMBER
			MAIL DATE 01/26/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/585,115

**Applicant(s)**

ZIV ET AL.

**Examiner**

CHRISTINE D. HOPKINS

**Art Unit**

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-14 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 03 June 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-850)  
Paper No(s)/Mail Date 3 June 09  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 3 June 2009. Claims 1-14 are now pending. The Examiner acknowledges the amendments to claim 1, as well as the addition of claims 13 and 14.

### *Drawings*

2. The drawings were received on 3 June 2009. These drawings are acceptable.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Kugler et al. (U.S. Pub. No. 2004/0147801). Kugler et al. (hereinafter Kugler) teaches a system to be implanted in a tissue conduit for treatment of disorders such as gastrointestinal reflux. Regarding claim 14, Kugler discloses a casing **100** comprising fixation elements **110** for intraluminal fixation of the device in a gastrointestinal tract; a valve disposed in said casing and controllable to move from a closed position, which restricts passage of matter, and an open position which permits passage of matter; and a controller operatively connected to said valve for externally controlling the position of the valve

between the closed and open positions [0098], wherein the fixation elements are disposed in said casing and sealed by closure members **280a** and **280b** ([0108] and [0111]) Also see Figs. 3 and 14.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-6, 8, 10 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Feng et al. (US 6,752,754 B1) in view of Kugler et al. (U.S. Pub. No. 2004/0147801).

Regarding Claims 1, 10 and 13, Feng et al. discloses a gastrointestinal device (artificial rectum 10; Col 3, line 51; Figure 1) comprising: a casing (outer body 16; Col 3, lines 65-66; Figure 1) comprising fixation elements (connector 32; Col 5, lines 54-56; Figure 1) adapted for intraluminal fixation of the device in the GI tract; a valve (inlet valve 40; Col 4, lines 27-29; Figure 1); and a controller (control unit 15; Col 3, lines 51-59; Figure 1) operatively connected to said valve for externally controlling the position of said valve between the closed and open positions.

However, Feng fails to disclose that the fixation elements are movable between closed and open positions. Kugler et al. (hereinafter Kugler) teaches a system to be implanted in a tissue conduit for treatment of disorders such as gastrointestinal reflux.

Regarding claims 1, 10 and 13, Kugler discloses a device for improving closure or restriction of a body lumen [0006], as similarly disclosed by Feng, comprising a casing **100** and fixation elements **110** ("barbs"), a valve and a controller for controlling the valve [0098]. Kugler further discloses that the fixation elements **110** are resiliently deflected inwardly of the casing ("the first position") and eventually extend from the recesses (or "openings" in accordance with claim 13) of the casing to penetrate the wall of the esophagus for fixation [0095]. The nitinol structure of the fixation elements **110** allows the elements to assume a contracted formation during delivery, and a deployed formation following delivery to the lumen [0083]. Feng discloses that that connector, or "fixation element" of Kugler may take numerous different configurations, such as staples (col. 7, lines 46-61). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to have constructed fixation elements as taught by Feng, of nitinol material as suggested by Kugler, in order to allow the fixation elements to assume a retracted "first" position for delivery to the lumen and a deployed "second" position for attachment to the lumen.

Regarding Claim 4, Feng et al. discloses a valve comprising a flexible sleeve which is deformable in the closed and open positions (elastomeric (having the property of being elastic) check valve (Col 5, lines 22-24).

Regarding Claim 5, Feng et al. discloses controller being a shutter (100 and 102; Figure 6; Col 6, lines 43-67) attached to flexible sleeves, said shutters being selectively movable to cause said flexible sleeve to be in either closed or open positions.

Regarding Claim 6, Feng et al. discloses shutters 100 and 102 being actuated by fluid pressure via pressure sensors (Col. 4, line 61 – Col 5, line 3; Figure 1).

Regarding Claim 8, Feng et al. discloses a controller comprising a fluid inlet 36 (Col 4, line 28; Figure 1) adapted to apply fluid pressure (via pressure sensor) to said flexible sleeves (an increase and decrease in fluid pressure in spring loaded ball-check valve will cause the valve to open and close, thus releasing fluid or air in this instance (Col 5, lines 11-19)) to open and close flexible sleeves.

7. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feng et al. in view of Kugler et al. (U.S. Pub. No. 2004/0147801) as applied to claim 1 above, and further in view of Brooks et al. (US 4,967,844).

Re Claims 2 and 3, the combination of Feng and Kugler discloses all of the claimed elements except for the valve being a ball valve rotatable between closed and open positions and the controller being at least one string attached to the ball valve, so that when the string is pulled, the ball valve rotates. Brooks et al. teaches the ball valve being rotatable between open and closed positions (Col 2, lines 64-66). Brooks et al. also teaches a string being attached to the ball valve assembly so that it rotates when pulled (Col 2, lines 63-68). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Feng and Kugler to include a ball valve (common valve for fluid flow control and Feng et al. states "valve 40 may take the form of any of numerous different types of valves....for performing the function of the valve as described herein." Col 6, lines 64-67) with a string for opening and closing, as taught

by Brooks et al., in order to easily and manually control the flow of waste matter through the device.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Feng et al. in view of Kugler et al. (U.S. Pub. No. 2004/0147801) as applied to claim 4 above, and further in view of Carter et al. (US 5,593,443).

Re Claim 7, the combination of Feng and Kugler discloses all of the claimed elements except for the controller comprising an inflatable member positioned about flexible sleeve, where the inflation and deflation of the inflatable member corresponds with the closing and opening of the flexible sleeve, respectively. Carter et al. teaches a pump and valve 20 and conduit 18 inflate a liquid filled tube (inflatable member) which pressed against the anal canal (effectively, causing the wall to be a "flap" or "flexible sleeve" valve and the inflating and deflating the tube with liquid "opens and closes" the "valve")(Col 5, lines 33-37). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Feng and Kugler to include an inflatable member, as taught by Carter et al., in order to provide an alternative way of controlling flow of fecal matter through the GI tract.

9. Claims 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feng et al. in view of Kugler et al. (U.S. Pub. No. 2004/0147801) as applied to claim 1 above, and further in view of Kagan et al. (US 2004/0092892).

Re Claim 9, the combination of Feng and Kugler discloses all of the claimed elements except for the fixation elements being rotatable hooks or barbs. Kagan et al. teaches the use of hooks or other known fasteners (such as barbs, which are used

interchangeably with hooks) for attaching a gastrointestinal sleeve device 400 (Figures 23A) into position (Paragraph [0276], lines 8-10). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Feng and Kugler to include rotatable hooks as fixation elements, as taught by Kagan et al., in order to secure the gastrointestinal device in position in an alternative way besides suturing (Figures 23A and 42B).

Re Claims 11 and 12, the combination of Feng and Kugler discloses all of the claimed elements except for an insertion assist device adapted to move said fixation elements to a fixed position in the GI tract or the insertion assist device comprises a trigger that actuates grabbers to rotate the rotatable hooks. Kagan et al. teaches an insertion assist device (surgical instrument 700) placing fixation elements (fasteners 710) into a fixed position (Paragraph [0394], lines 1-9; Figures 49-51). Additionally, Kagan et al. teaches a trigger (control button 718; paragraph [0394], lines 27-28; Figures 49-51) that actuates a grabber (articulated arm 706; paragraph [0394], lines 7-9; Figures 49-51). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Feng and Kugler to include the elements of the insertion assist device, as taught by Kagan et al., for the purpose of facilitating the placement of connectors/fixation elements inside the patient's body.



***Response to Arguments***

10. Applicant's arguments filed 3 June 2009 with respect to the objection to the drawings have been fully considered and are persuasive. The objection to the drawings has been withdrawn.

11. Applicant's arguments filed 3 June 2009 with respect to the rejection of claims 1, 4-6 and 8 under 35 U.S.C. 102(e) citing Feng ('754) have been fully considered but are moot in view of the new grounds of rejection under 35 U.S.C. 103(a) citing Feng ('754) in view of Kugler ('801).

12. Applicant's arguments filed 3 June 2009 with respect to the rejection of claims 2 and 3 under 35 U.S.C. 103(a) citing Feng ('754) in view of Brooks ('844) have been fully considered but are moot in view of the new grounds of rejection 3 under 35 U.S.C. 103(a) citing Feng ('754) in view of Kugler ('801) and further in view of Brooks ('844).

13. Applicant's arguments filed 3 June 2009 with respect to the rejection of claim 7 under 35 U.S.C. 103(a) citing Feng ('754) in view of Carter ('443) have been fully considered but are moot in view of the new grounds of rejection 3 under 35 U.S.C. 103(a) citing Feng ('754) in view of Kugler ('801) and further in view of Carter ('443).

14. Applicant's arguments filed 3 June 2009 with respect to the rejection of claims 9-12 under 35 U.S.C. 103(a) citing Feng ('754) in view of Kagan ('892) have been fully

considered but are moot in view of the new grounds of rejection 3 under 35 U.S.C. 103(a) citing Feng ('754) in view of Kugler ('801) and further in view of Kagan ('892).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE D. HOPKINS whose telephone number is (571)272-9058. The examiner can normally be reached on Monday-Friday, 7 a.m.-3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II can be reached on (571) 272-4730. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D. H./  
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